

N61165.AR.005240
CNC CHARLESTON
5090.3a

NO FURTHER ACTION (NFA) ASSESSMENT REPORT DATED 9 OCTOBER 1996 FOR
BUILDING NS-719 CNC CHARLESTON SC
12/06/1996
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Mr. Gabriel L. Magwood
Southern Division NFEC
P.O. Box 190010
2155 Eagle Drive
North Charleston, South Carolina 29419-9010

Re: Assessment Report dated October 9, 1996
Charleston Naval Base Building NS 719 (Site Identification # 17669)
Charleston County

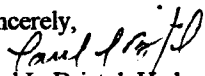
Date: December 6, 1996

Dear Mr. Magwood:

The author has completed technical review of the referenced document. As submitted, the report provides analytical results of environmental sampling conducted to determine if releases have occurred from operation of the referenced system. The data presented indicate low levels of polynuclear aromatic hydrocarbons (PAH) were identified in the tank pit. These results are below levels proposed in the Soil Corrective Action Plan (dated July 18, 1996) and appear to indicate that no additional endeavors for remedial actions (soils removal) and contamination characterization are warranted at the referenced site at this time. If in the future contamination is identified which is attributable to this site, additional assessments and/or remedial endeavors may be required, as appropriate.

Should you have any questions, please contact me at (803) 734-5328.

Sincerely,


Paul L. Bristol, Hydrogeologist
Groundwater Assessment and Development Section
Bureau of Water

cc: Trident District EQC



DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
P.O. BOX 190010
2155 EAGLE DRIVE
NORTH CHARLESTON, S.C. 29419-9010

5090
Code 1849
9 Oct 1996

L 12396
L 121096
PLM

Mr. Paul Bristol
South Carolina Department of Health
and Environmental Control
Ground-Water Protection Division
2600 Bull Street
Columbia, SC 29201

Bdg NS 719
17669

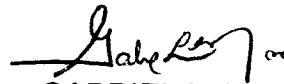
UST ASSESSMENT REPORT FOR: NS 765, NS 705, NS 708, NS 701, NS 719, NS 717 AND NS 718 CHARLESTON NAVAL COMPLEX, CHARLESTON, SC

Dear Mr. Bristol:

Enclosed are the Assessment Reports for the closure of underground storage tanks NS 765, NS 705, NS 708, NS 701, NS 719, NS 717 AND NS 718 located at the Charleston Naval Complex, Charleston, SC.

If you have any questions please contact me at 803-820-7307.

Sincerely,


GABRIEL L. MAGWOOD
Petroleum/UST

RECEIVED
OCT 11 1996
Groundwater Protection
Division

L 12394
L 1210 94
PLW

South Carolina Department of Health and Environmental Control (S.C.D.H.E.C.)
Underground Storage Tank (UST) Assessment Report

Date Received

State Use Only

Submit Completed Form to:
UST Regulatory Section
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 734-5331

I OWNERSHIP OF UST(S)

Agency/Owner: Southern Division, Naval Facilities Engineering Command, Caretaker Site Office

Mailing Address: P.O. Box 190010

City: N. Charleston State: SC Zip Code: 29419-9010

Area Code: 803 Telephone Number: 743-9985 Contact Person: LCDR Paul Rose

II SITE IDENTIFICATION AND LOCATION

Site I.D. #: N/A Unregulated

Facility Name: Charleston Naval Base Complex, NS 719

Street Address: 171 Turnbull Ave.

City: North Charleston County: Charleston

III CLOSURE INFORMATION

Closure Started: 14 June 1996

Closure Completed: 17 June 1996

Number of USTs Closed: 1

N/A

SPORTENVDETHASN

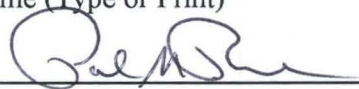
Consultant

UST Removal Contractor

IV. CERTIFICATION (Read and Sign after completing entire submittal)

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate and complete.

Paul M. Rose
Name (Type or Print)


Signature

RECEIVED

OCT 11 1996

Groundwater Protection
Division

V. UST INFORMATION

- A. Product.....
- B. Capacity.....
- C. Age.....
- D. Construction Material.....
- E. Month/Year of Last Use.....
- F. Depth (ft.) To Base of Tank.....
- G. Spill Prevention Equipment Y/N.....
- H. Overfill Prevention Equipment Y/N.....
- I. Method of Closure Removed/Filled.....
- J. Visible Corrosion or Pitting Y/N.....
- K. Visible Holes Y/N.....

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Fuel oil						
280						
> 20 yrs						
Steel						
4/96						
6' 6"						
N						
N						
R						
N						
N						

- L. Method of disposal for any USTs removed from the ground (attach disposal manifests).

UST NS 719 was removed, drained and cleaned. It was then cut up for recycling as scrap metal. See Attachment III.

- M. Method of disposal for any liquid petroleum, sludges, or waste waters removed from the USTs (attach disposal manifests).

Residual waste oil was pumped into a 55 gallon drum and recycled.

- N. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST.

Tank appeared to be in good condition. No corrosion, holes, or pitting was found.

VI. PIPING INFORMATION

- A. Construction Material.....
- B. Distance from UST to Dispenser.....
- C. Number of Dispensers.....
- D. Type of System P/S.....
- E. Was Piping Removed from the Ground? Y/N....
- F. Visible Corrosion or Pitting Y/N.....
- G. Visible Holes Y/N.....
- H. Age.....

Note 1: UST 719 provided heating oil for a residence.

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Copper & Steel					
N/A (See Note 1)					
N/A (See Note 1)					
S					
Y					
N					
N					
> 20 Yrs					

- I. If any corrosion, pitting, or holes were observed, describe the location and extent for each line.

No corrosion, pitting or holes were observed.

VII. BRIEF SITE DESCRIPTION AND HISTORY

NS 719 served as housing for naval personnel and their families. UST 719 provided heating oil for the residence.

VIII. SITE CONDITIONS

Yes No Unk

<p>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate depth and location on the site map.</p>		X	
<p>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</p>		X	
<p>C. Was water present in the UST excavation, soil borings, or trenches?</p> <p>If yes, how far below land surface (indicate location and depth)?</p> <p>_____</p>		X	
<p>D. Did contaminated soils remain stockpiled on site after closure?</p> <p>If yes, indicate the stockpile location on the site map.</p> <p>Name of DHEC representative authorizing soil removal:</p> <p>_____</p>		X	
<p>E. Was a petroleum sheen or free product detected on any excavation or boring waters?</p> <p>If yes, indicate location and thickness.</p>		X	

IX. SAMPLE INFORMATION

S.C.D.H.E.C. Lab Certification Number 10120

[illegible]

* = Depth Below the Surrounding Land Surface

X. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect and store (preserve) the samples.

After the removal of UST 719 soil samples were taken. The soil samples were collected from the bottom of the excavation from native soils at a depth of 6' 6" below land surface as shown in Site Map Number 2. Sampling was performed in accordance with SC DHEC R.61-92 Part 280 and SC DHEC UST Assessment Guidelines.

The samples are identified as follows:

	Detachment Charleston		General Engineering Labs
Soil Sample	UST719-1	=	SPORT -0079-3
Soil Sample	UST719-2	=	SPORT -0079-4

Sample jars were prepared by the testing laboratory. The grab method was utilized to fill the sample containers leaving as little head space as possible and immediately capped.

The samples were marked, logged, and immediately placed in sample coolers packed with ice to maintain an approximate temperature of 4° C. Tools were thoroughly cleaned and decontaminated with organic-free soap and water after each sample.

The samples remained in the custody of SPORTENVDETHASN until they were transferred to General Engineering Laboratories for analysis as documented in the attached Chain-of-Custody Record.

XI. RECEPTORS

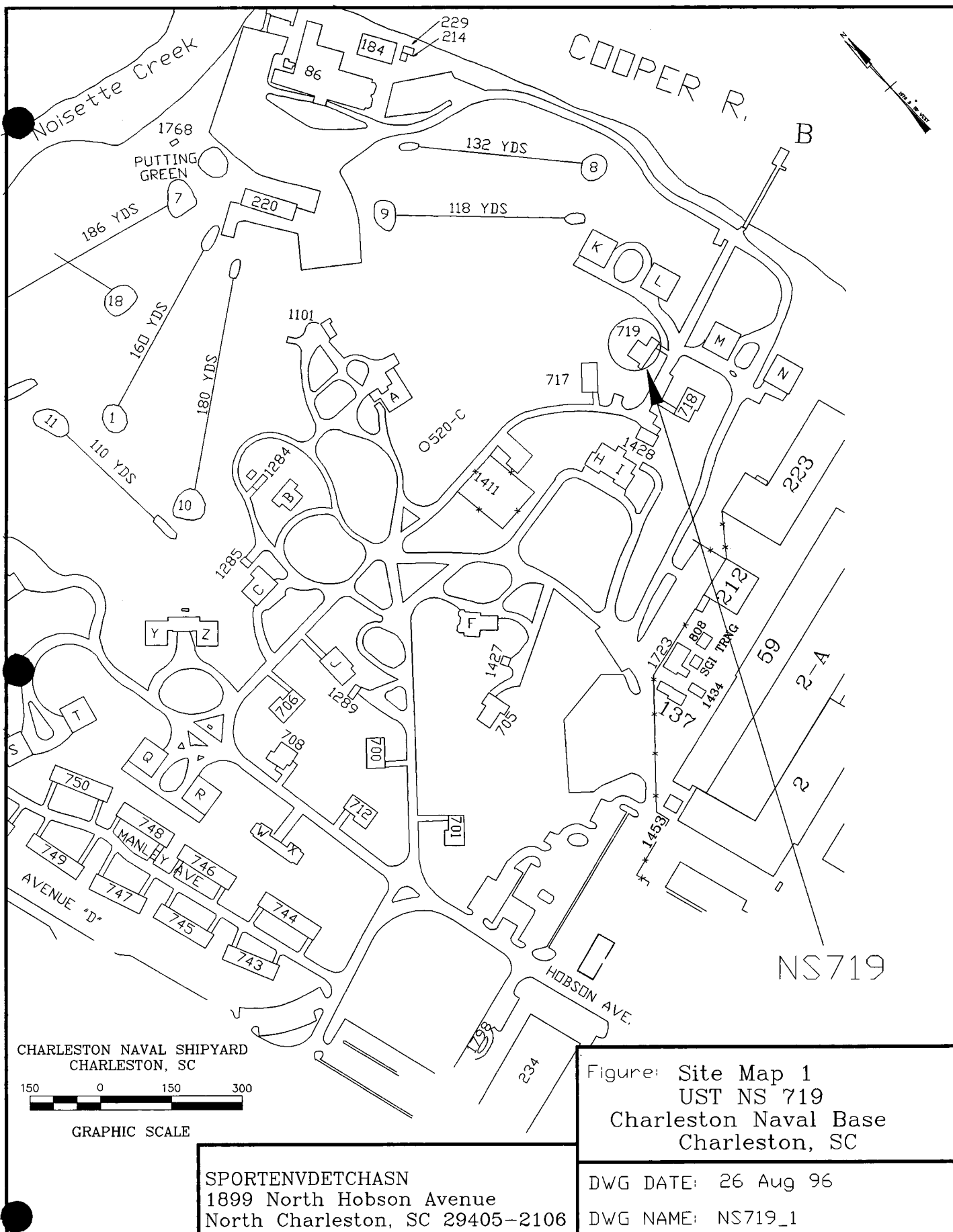
Yes No

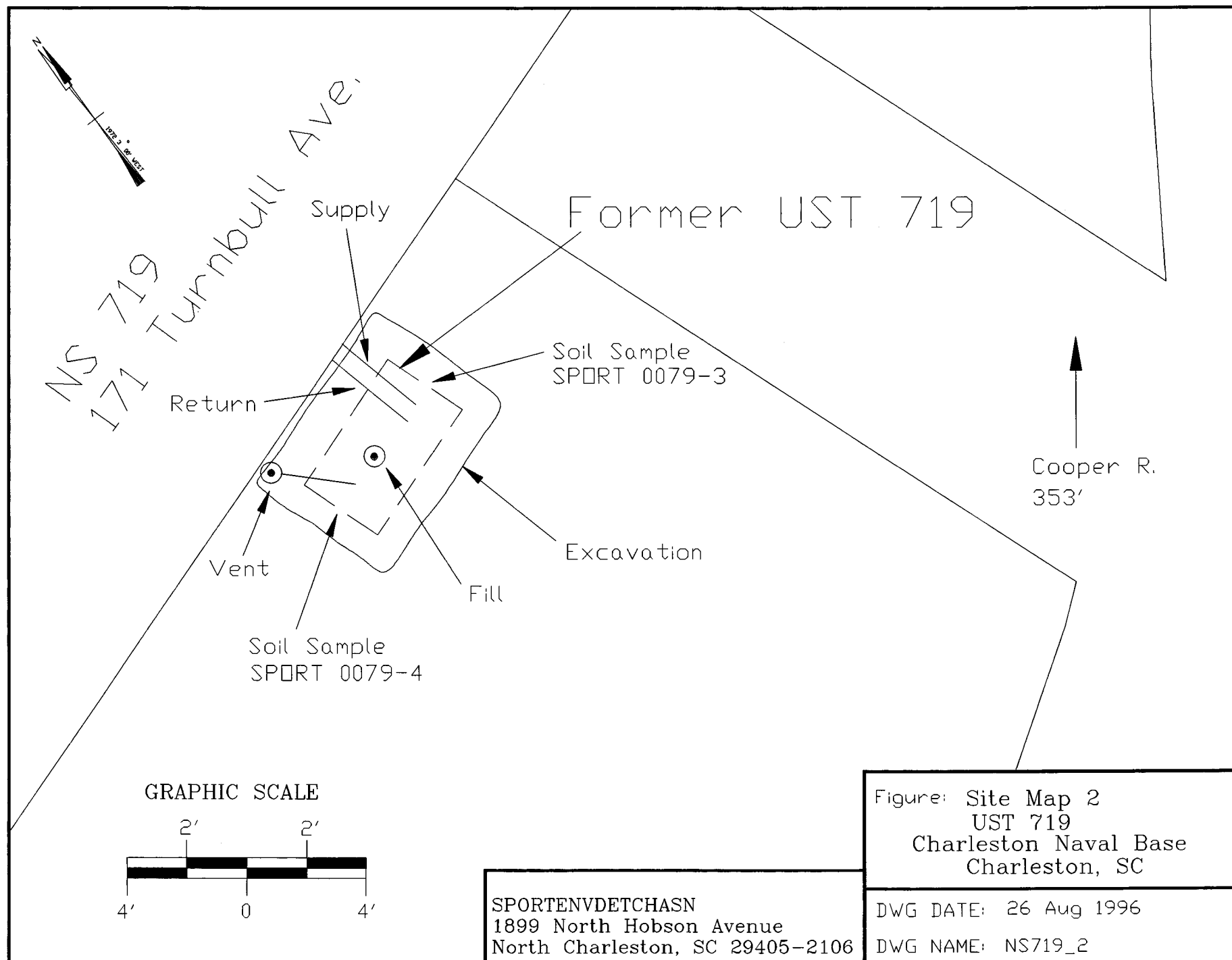
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? <div style="text-align: right;">[*Cooper River 353']</div>	X*	
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		X
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) located within 100 feet of the UST system		X
	If yes, indicate the type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? <div style="text-align: right;">[*See Site Map 3]</div>	X*	
	If yes, indicate the type of utility, distance, and direction on the site map.		
E.	Has contaminated soil been identified at a depth of less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		
	If yes, indicate the area of contaminated soil on the site map.		X

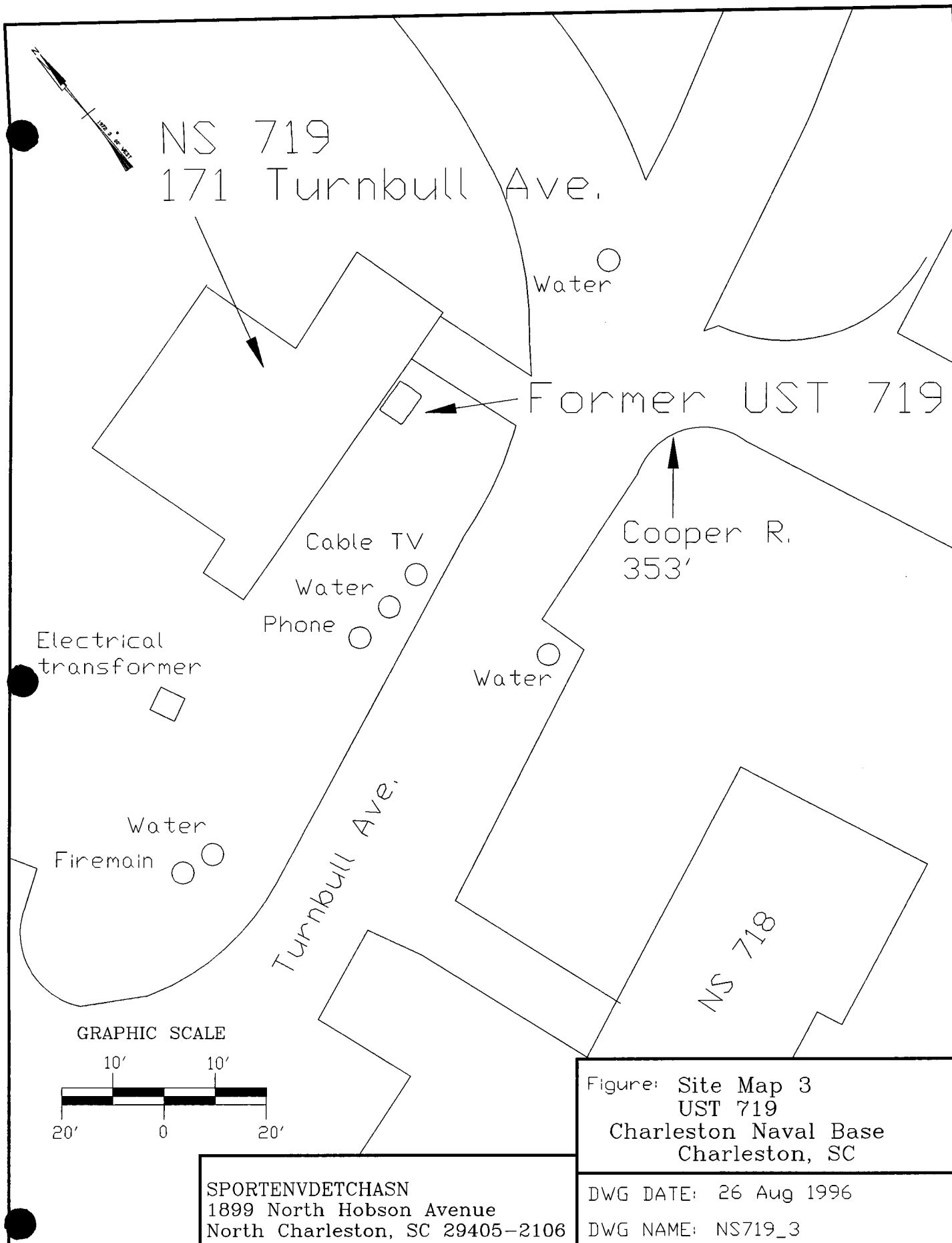
SITE MAP

You must supply a scaled site map. It should include all buildings, road names, utilities, tank and pump island locations, sample locations, extent of excavation, and any other pertinent information.

Site Maps 1, 2, and 3
No photographs available





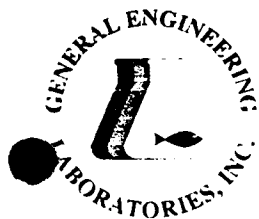


Attachment II

ANALYTICAL RESULTS

You must submit the laboratory report and chain-of-custody form for the samples. These samples must be analyzed by a South Carolina certified laboratory.

Certified Analytical Results
Chain-of-Custody



GENERAL ENGINEERING LABORATORIES

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CERTIFICATE OF ANALYSIS

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: June 26, 1996

Page 1 of 3

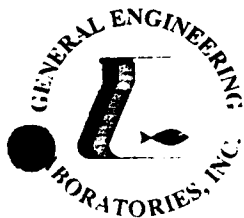
Sample ID : SPORT0079-3
Lab ID : 9606326-03
Matrix : Soil
Date Collected : 06/12/96
Date Received : 06/18/96
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
BTEX - 4 items											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	THL	06/21/96	1103	86289	1
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.00	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.990	1.00	2.00	ug/kg	1.0					
Extractable Organics											
Polynuclear Aromatic Hydrocarbons - 16 items											
Acenaphthene	U	0.00	164	330	ug/kg	1.0	JCB	06/25/96	2241	86390	2
Acenaphthylene	U	0.00	164	330	ug/kg	1.0					
Anthracene	U	0.00	164	330	ug/kg	1.0					
Benzo(a)anthracene	J	230	164	330	ug/kg	1.0					
Benzo(a)pyrene	U	0.00	164	330	ug/kg	1.0					
Benzo(b)fluoranthene	J	184	164	330	ug/kg	1.0					
Benzo(ghi)perylene	U	0.00	164	330	ug/kg	1.0					
Benzo(k)fluoranthene	U	0.00	164	330	ug/kg	1.0					
Chrysene	U	0.00	164	330	ug/kg	1.0					
Dibenzo(a,h)anthracene	U	0.00	164	330	ug/kg	1.0					
Fluoranthene		649	164	330	ug/kg	1.0					
Fluorene	U	0.00	164	330	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	164	330	ug/kg	1.0					
Naphthalene	U	0.00	164	330	ug/kg	1.0					
Phenanthrene		649	164	330	ug/kg	1.0					
Pyrene		581	164	330	ug/kg	1.0					

The following prep procedures were performed:
GC/MS Base/Neutral Compounds

GWL 06/25/96 1630 86390 3





GENERAL ENGINEERING LABORATORIES

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SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: June 26, 1996

Page 2 of 3

Sample ID : SPORT0079-3

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	98.1	(30.0 - 115.)
Nitrobenzene-d5	M610	82.7	(23.0 - 120.)
p-Terphenyl-d14	M610	95.3	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	86.5	(59.7 - 159.)
Dibromofluoromethane	BTEX-8260	111.	(74.0 - 128.)
Toluene-d8	BTEX-8260	95.3	(53.4 - 163.)
Bromofluorobenzene	NAP-8260	86.5	(59.7 - 159.)
Dibromofluoromethane	NAP-8260	111.	(74.0 - 128.)
Toluene-d8	NAP-8260	95.3	(53.4 - 163.)

M = Method	Method-Description
M 1	EPA 8260
M 2	EPA 8270
M 3	EPA 3550

Notes:

The qualifiers in this report are defined as follows:

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicate that a quality control analyte recovery is outside of specified acceptance criteria.

GEL Laboratory Certifications

AL - 41040
CA - 2089

AZ - AZ0514
CT - PH-0169

EPI Laboratory Certifications

AL - 41050
CA - I-1023/2056

AZ - AZ0514
CT - PH-0175



Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106
Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: June 26, 1996

Page 3 of 3

Sample ID

: SPORT0079-3

GEL Laboratory Certifications

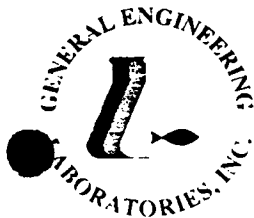
EPI Laboratory Certifications

DE - SC012	FL - E87156/87294	FL - E87472/87458	MS - 29417
ME - SC012	MS - 10120	NY - 11502	RI - 138
NC - 233	NY - 11501	SC - 10582	TN - 02934
RI - 135	SC - 10120	UT - E-227	VA - 00111
TN - 02934	UT - E-251	WA - C225	NJ - 79002
VA - 00151	WA - C223	PA - 68-485	WV - 235

WI - 999887790

This data report has been prepared and reviewed
in accordance with General Engineering Laboratories
standard operating procedures. Please direct
any questions to your Project Manager, Karen Blakeney at (803) 769-7386.


Analytical Report Specialist



GENERAL ENGINEERING LABORATORIES

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CERTIFICATE OF ANALYSIS

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Page 1 of 3

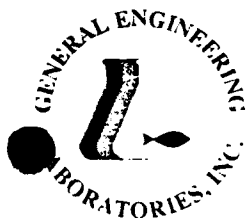
Sample ID : SPORT0079-4
Lab ID : 9606326-04
Matrix : Soil
Date Collected : 06/12/96
Date Received : 06/18/96
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
BTEX - 4 items											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	JAC	06/19/96	1500	86165	1
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.00	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.00	1.00	2.00	ug/kg	1.0					
Extractable Organics											
Polynuclear Aromatic Hydrocarbons - 16 items											
Acenaphthene	U	0.00	165	330	ug/kg	1.0	JCB	06/25/96	2313	86390	2
Acenaphthylene	U	0.00	165	330	ug/kg	1.0					
Anthracene	U	0.00	165	330	ug/kg	1.0					
Benzo(a)anthracene	U	0.00	165	330	ug/kg	1.0					
Benzo(a)pyrene	U	0.00	165	330	ug/kg	1.0					
Benzo(b)fluoranthene	U	0.00	165	330	ug/kg	1.0					
Benzo(ghi)perylene	U	0.00	165	330	ug/kg	1.0					
Benzo(k)fluoranthene	U	0.00	165	330	ug/kg	1.0					
Chrysene	U	0.00	165	330	ug/kg	1.0					
Dibenzo(a,h)anthracene	U	0.00	165	330	ug/kg	1.0					
Fluoranthene	U	0.00	165	330	ug/kg	1.0					
Fluorene	U	0.00	165	330	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	165	330	ug/kg	1.0					
Naphthalene	U	0.00	165	330	ug/kg	1.0					
Phenanthrene	U	0.00	165	330	ug/kg	1.0					
Pyrene	U	0.00	165	330	ug/kg	1.0					

The following prep procedures were performed:
GC/MS Base/Neutral Compounds

GWL 06/25/96 1630 86390 3





GENERAL ENGINEERING LABORATORIES

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SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: June 26, 1996

Page 2 of 3

Sample ID : SPORT0079-4

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	95.0	(30.0 - 115.)
2-Fluorobiphenyl	M610	95.0	(30.0 - 115.)
Nitrobenzene-d5	M610	81.0	(23.0 - 120.)
Nitrobenzene-d5	M610	81.0	(23.0 - 120.)
p-Terphenyl-d14	M610	97.4	(37.3 - 128.)
p-Terphenyl-d14	M610	97.4	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	109.	(59.7 - 159.)
Dibromofluoromethane	BTEX-8260	100.	(74.0 - 128.)
Toluene-d8	BTEX-8260	104.	(53.4 - 163.)
Bromofluorobenzene	NAP-8260	109.	(59.7 - 159.)
Dibromofluoromethane	NAP-8260	100.	(74.0 - 128.)
Toluene-d8	NAP-8260	104.	(53.4 - 163.)

M = Method	Method-Description
M 1	EPA 8260
M 2	EPA 8270
M 3	EPA 3550

Notes:

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GEL Laboratory Certifications

AL - 41040

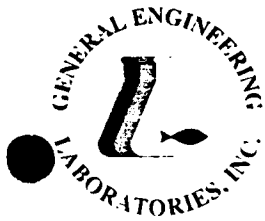
AZ - AZ0514

EPI Laboratory Certifications

AL - 41050

AZ - AZ0514





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Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

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Page 3 of 3

Sample ID : SPORT0079-4

GEL Laboratory Certifications

CA - 2089
DE - SC012
ME - SC012
NC - 233
RI - 135
TN - 02934
VA - 00151
WI - 999887790

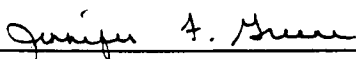
CT - PH-0169
FL - E87156/87294
MS - 10120
NY - 11501
SC - 10120
UT - E-251
WA - C223

EPI Laboratory Certifications

CA - I-1023/2056
FL - E87472/87458
NY - 11502
SC - 10582
UT - E-227
WA - C225
PA - 68-485

CT - PH-0175
MS - 29417
RI - 138
TN - 02934
VA - 00111
NJ - 79002
WV - 235

This data report has been prepared and reviewed
in accordance with General Engineering Laboratories
standard operating procedures. Please direct
any questions to your Project Manager, Karen Blakeney at (803) 769-7386.


Analytical Report Specialist



Page 1 of 1 960x326

General Engineering Laboratories, Inc.
2040 Savage Road
Charleston, South Carolina 29414
P.O. Box 30712
Charleston, South Carolina 29417
(803) 556-8171

[illegible]

White = sample collector Yellow = file Pink = with report

Attachment III

Certificate of Disposal (tank)

O.S. Utterm 8/27/96
(Name) (Date)